

E 105 110 115 120 125 130 135 140 145 150 155 E

N 35

TROPICAL STORM VANESSA

BEST TRACK TC-03W

20 APR- 28 APR 91

MAX SFC WIND 45KT

MINIMUM SLP 991MB

LEGEND

- 6-HR BEST TRACK POSITION
- SPEED OF MOVEMENT (KT)
- INTENSITY (KT)
- POSITION AT XX/0000Z
- TROPICAL DISTURBANCE
- TROPICAL DEPRESSION
- TROPICAL STORM
- TYPHOON
- SUPER TYPHOON START
- SUPER TYPHOON END
- EXTRATROPICAL
- SUBTROPICAL
- DISSIPATING STAGE
- FIRST WARNING ISSUED
- LAST WARNING ISSUED

30

25

20

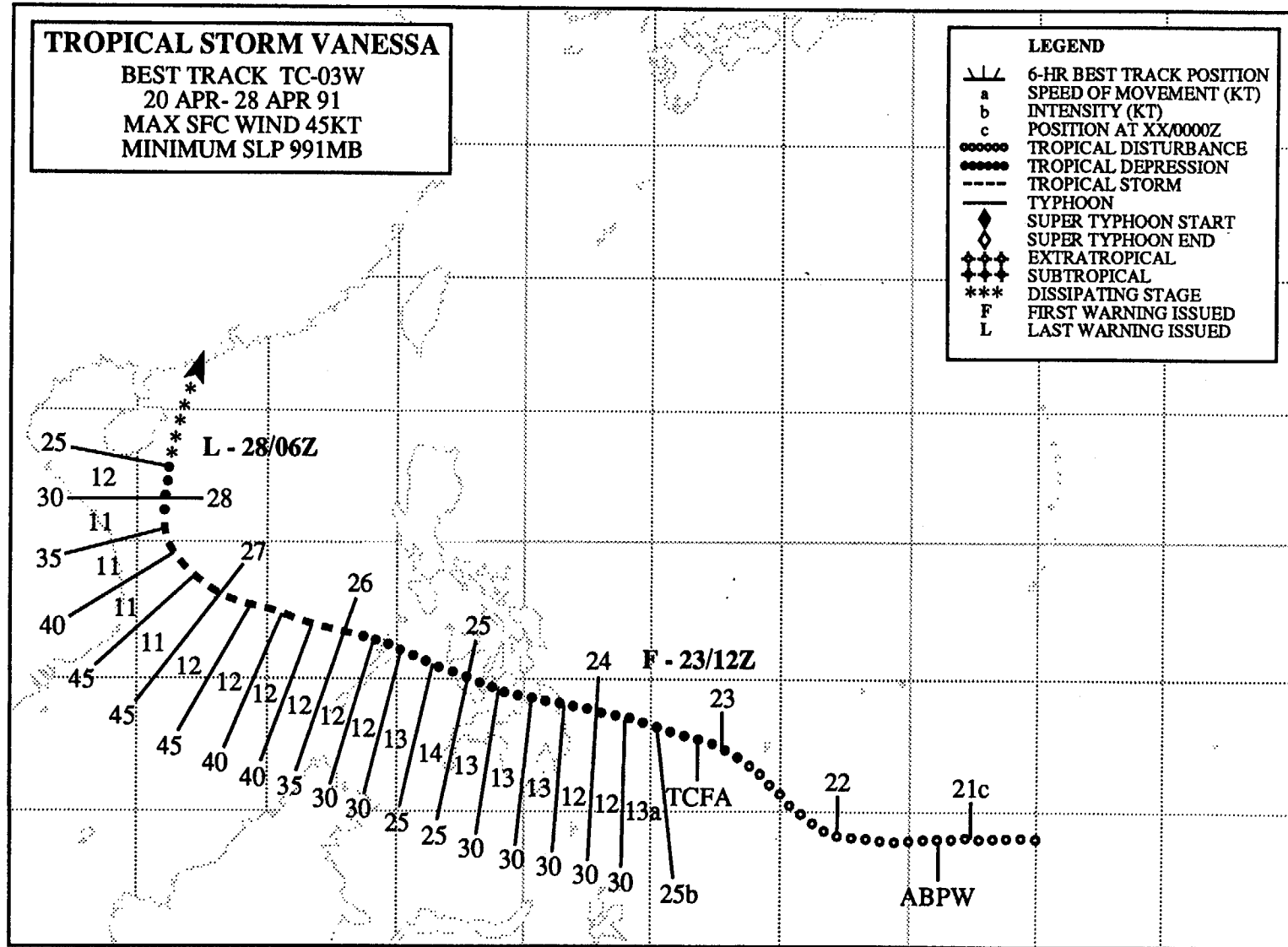
15

10

5

EQ

42



TROPICAL STORM VANESSA (03W)

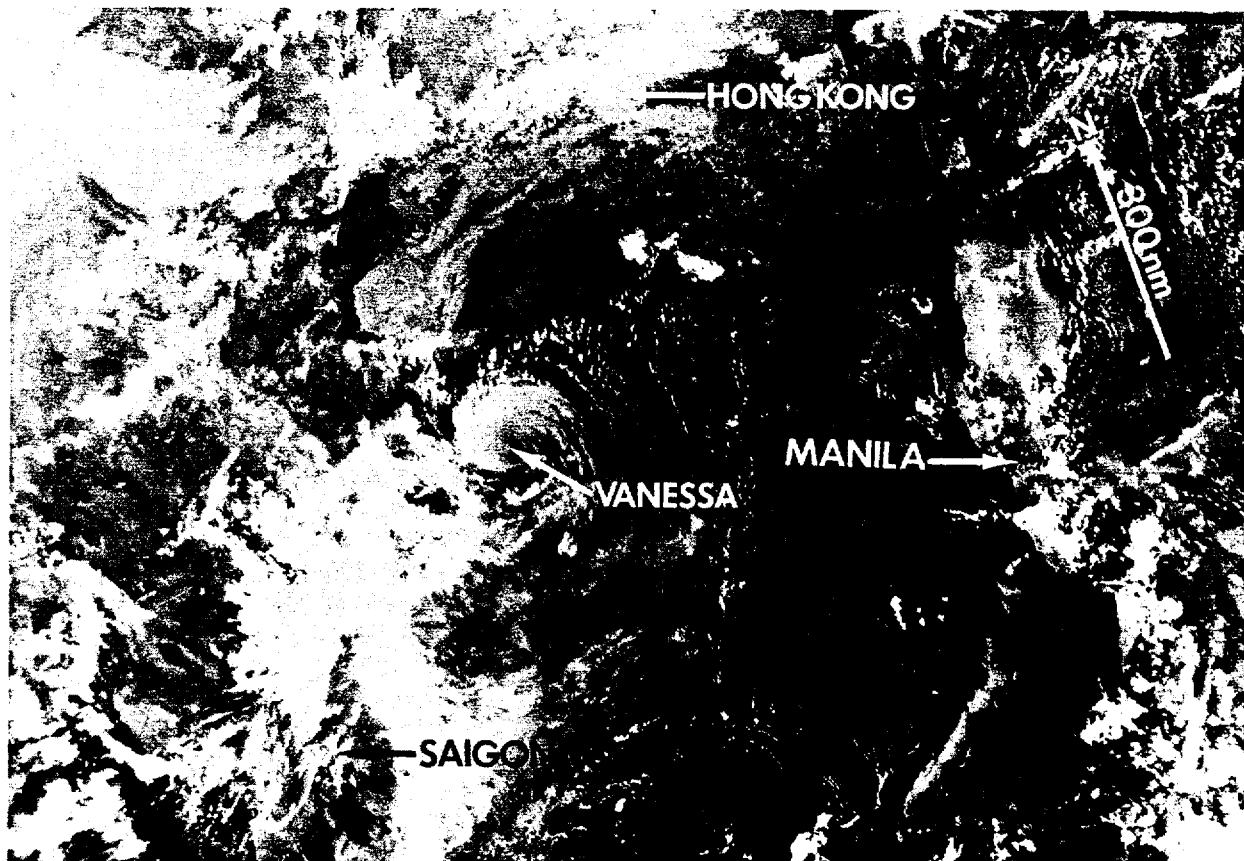


Figure 3-03-1 The exposed low-level center of Tropical Storm Vanessa approaches the coast of Vietnam (271905Z NOAA April enhanced infrared imagery).

After Typhoon Tim (02W) in mid-March, the near-equatorial trough remained relatively inactive until Vanessa's convection flared up to the south of Guam over a month later. This disturbance with its persistent convection was first mentioned in the Significant Tropical Weather Advisory on 21 April. A Tropical Cyclone Formation Alert was issued at 230500Z when animated satellite imagery revealed that individual thunderstorms had started rotating cyclonically about a singular point. At 231200Z, the alert was followed by the first warning on Tropical Depression 03W, based on a 30 kt (15 m/sec) ship report. Vanessa did not intensify as it tracked south of the subtropical ridge and across the central Philippines. Twenty-four hours after leaving the Philippine Islands, it reached tropical storm intensity at 260000Z, based on a satellite intensity estimate of 35 kt (18 m/sec). Vanessa peaked at 45 kt (23 m/sec) in the South China Sea at 261800Z. Less than a day later, vertical wind shear caused Tropical Storm Vanessa to weaken rapidly. Satellite imagery showed that Vanessa had completely lost its deep central convection. This prompted the JTWC to issue its final warning at 280600Z. Embedded in the prevailing low-level flow, the remnants of Tropical Storm Vanessa moved northward through the axis of the subtropical ridge, and dissipated southwest of Hong Kong.